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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,737	08/06/2001	Michael C. Fischer	HP-10981124	2129
7590	02/09/2005		EXAMINER	
HEWLETT-PACKARD COMPANY Intellectual Property Administration P.O. Box 272400 Fort Collins, CO 80527-2400			ORTIZ CRIADO, JORGE L	
			ART UNIT	PAPER NUMBER
			2655	

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/923,737	FISCHER ET AL.	
	Examiner	Art Unit	
	Jorge L Ortiz-Criado	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 13 December 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-16 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-16 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/13/2004.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The feature determining a delay offset “**without requiring a measurement of a boundary delineating the individual bits of data**” cannot be found described in the specification, as filed, nor can it be found in the specific references to paragraphs [004] and [0020] and Figure 2 as asserted by Applicant in the amendment of 12/13/2004.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1,6,11 and 16 recites the limitation “only three measurements”/”only three signal measurements”/“three signal measurements” and it is unclear what measurements are taken making the claim invention indefinite because, as claimed, two “measurements” are founded, which are “a first difference and a second difference”. There is no third measurement made, as claimed. Furthermore, a third measurement of “a boundary delineating the individual bits of data” appears to be not executed and not used, because is not required to the claimed invention. Where or What particularly is the third measurement, as claimed? Where or What particularly are the three measurements?

Claims 1,6,11 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: Steps involved with “**three measurements**” or “**a third measurement**” or “**three signal measurements**”

Claims 1,6,11 and 16 are rejected under 35 U.S.C. 112, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1,6,11 and 16 recited the limitation “the individual bits of data”. The term “**data**” renders the claim indefinite because it is ambiguous whether the “**data**” is one of the “previously recorded data”, “test data” or “new data”. What particularly is the “**data**”, as claimed?

Claims 1,6,11 and 16 recite the limitation "the individual bits of data" in line 10 of the claims (1,6); line 14 of the claim 11; lines 3-4 and line 16 of the claim 16. There is insufficient antecedent basis for this limitation in the claim.

Claims 1,6,11 and 16 recite the limitation "the appropriate delay offset" in line 11 of the claims (1,6); line 15 of the claim 11; lines 3-4 and line 16 of the claim 16. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Taussig U.S. Patent No. 6,636,467.

Regarding claim 1 and 16, Taussig discloses a disk-based data storage system, a method for synchronizing newly recorded data with previously recorded data (See col. 2, lines 11-28), comprising:

measuring a first difference between a wobble reference signal and a read clock of previously recorded data (See col. 2, lines 11-28; col. 5, lines 47-57; Fig. 5-530); writing test data on a test track to measure a second difference between the wobble reference signal and the test data, the test data written synchronous with a write clock (See col. 5, lines 58-63; Fig. 5-540,542)

determining a delay offset by comparing the first difference and the second difference; and writing new data using the write clock and the delay offset such that the new data is synchronized with the previously recorded data “using the wobble reference signal without requiring a measurement of a boundary delineating the individual bits of data, such that the appropriate delay offset is calculated utilizing **“only three measurements/ “only three signals measurements/ “three signal measurements”** (See col. 5, line 64 to col. 6 line 21; Fig. 5-544,546,548,550; col. 7, line 31 to col. 8, line 24; Figure 7)

Regarding claim 2, Taussig discloses writing the test data to the test track (See col. 5, lines 58-63; Fig. 5-540,542)

with the delay offset set to zero (See col. 5, lines 36-45); reading the test data from the test track; subtracting the first difference from the second difference to determine the delay offset for the write clock calibration delay (See col. 5, line 58 to col. 6 line 21; Fig. 5-544,546,548,550)

Regarding claim 3, Taussig discloses inserting the delay offset into a wobble-to-laser path to cause the new data to have a same epoch as the previously recorded data (See col. 5, line 64 to col. 6 line 21; Fig. 5-548).

Regarding claim 4, Taussig discloses the step of checking whether an error value is within predetermined limits, wherein the error value is the difference between the first difference the second difference (See col. 5, line 64 to col. 6 line 21; Fig. 5-544,546,548,550).

Regarding claim 5, Taussig discloses adjusting the write clock in accordance with the error value, if the error value is outside the predetermined limits (See col. 5, line 64 to col. 6 line 21; Fig. 5-548).

Regarding claims 6-10 and 11-15, apparatus claims 6-10 and 11-15 are drawn to apparatus for performing the corresponding method claims 1-5 and 16. Therefore claims 6-10 and 11-15 correspond to the method claims 1-5 and 16 and are rejected for the same reasons of anticipation as outlined above.

Response to Arguments

7. Applicant's arguments filed 12/13/2004 have been fully considered but they are not persuasive.

In regard to Applicant's response to the rejection of claims 1-16, as unpatentable over Taussig, Applicants argues that Taussig does not disclose or suggest determining a delay offset by using the wobble reference signal "**without requiring a measurement of a boundary delineating the individual bits of data, such that the appropriate delay offset is calculated utilizing only three measurements**"

The feature determining a delay offset "**without requiring a measurement of a boundary delineating the individual bits of data**" cannot be found described specification Claim 1,6,11 and 16 recites the limitation "only three measurements"/"only three signal measurements"/"three signal measurements" and it is unclear what measurements are taken making the claim invention indefinite, as claimed, two "measurements" are founded, which are "a first difference and a second difference". There is no third measurement made, as claimed.

Furthermore, a third measurement of "boundary delineating the individual bits of data" appear to be not executed and not used, because is not required to the claimed invention. Where or What particularly is the third measurement, as claimed? Where or What particularly are the three measurements?

The Examiner disagrees with applicants assertion, because Taussig measures a first difference/(time offset/ phase difference) between a wobble reference signal (1)", which is the signal outputted from clock channel "484" in Fig. 4b (See col. 5, lines 17-21, lines 52-54; Fig. 4b) and a read clock of previously recorded data (2) ("calibration data sequence"), which is "data previously recorded" on the disk, is then read from the data channel "482" in Fig. 4b, and the first difference/(time offset/ phase difference) between a wobble reference signal and the read

clock of previously recorded data/("calibration data sequence previously") is obtained, in steps "520" to "530" of Fig. 5, (See col. 5, lines 35-57),

Tausing measures writes test data on a test track to measure a second difference between the wobble reference signal (1) and the test data (3), the test data written synchronous with a write clock (See col. 5, lines 58-63; Fig. 5-540,542)

And, determines a delay offset by comparing the **first difference** and the **second difference**, utilizing only three signals measurements,

- (1) the wobble reference signal
- (2) the read clock of previously recorded data
- (3) the clock of the test data

without requiring a measurement of a boundary delineating the individual bits of data, as described in col. 5, line 64 to col. 6 line 21; Fig. 5-544,546,548,550; col. 7, line 31 to col. 8, line 24; Figure 7)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm),Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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DAVID L. OMETZ
PRIMARY EXAMINER